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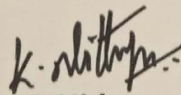
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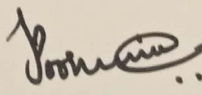
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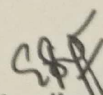
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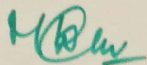
Certificate

This is to certify that **DR.T.RENISHEYA JOY JEBA MALAR** of **MUSLIM ARTS COLLEGE, THIRUVITHANCODE** has presented a paper (Oral) entitled "*Physiochemical Study of Nixtamalized brown top Millet Flour fortified with Nelumbo nucifera flower powder*" in the International Conference on "Innovative Approaches in Life Sciences-ICIALS23" organized by the Department of Food Science & Nutrition, The American College, Madurai on 24 & 25 March 2023.


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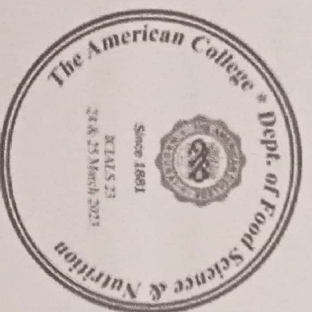
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PHYSIOCHEMICAL STUDY OF NIXTAMALIZED BROWN TOP MILLET FLOUR
FORTIFIED WITH *NELUMBO NUCIFERA* FLOWER POWDER

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Abstract

Nelumbo nucifera Gaertn (Nymphaeaceae), a perennial aquatic plant, has been used as a medicinal herb in China and India. It has been recorded in the most famous medicinal book in China for more than 400 years. Different part of plant (leaves, seeds, flower, and rhizome) can be used in traditional system of medicine. The pharmacological studies have shown that *N. nucifera* possesses various notable pharmacological activities like anti-ischemic, antioxidant, anticancer, antiviral, antiobesity, lipolytic, hypocholesteremic, antipyretic, hepatoprotective, hypoglycaemic, antidiarrhoeal, antifungal, antibacterial, antiinflammatory and diuretic activities. The objectives of the current work was to study the physiochemical properties of Nixtamalized Brown top Millet flour enriched with *Nelumbo nucifera* at 2.68 and 10%. Proximate analysis, thermal, viscosity, textural and acceptability analysis were done. It was found that the *Nelumbo* a new sierra is rich in protein phytochemicals, antioxidants, phenolic compounds and that inductive rated coupled plasma mass spectrometry analysis showed the presence of important minerals. The overall the results revealed that the tested cooking ingredients were effective reducing the target mycotoxins. The ANOVA analysis revealed that the treatment of calcium concentrations and the length of boiling time, influence of water content, ash, protein, fat, calcium content of nixtamal fortified *Nelumbo nucifera* Brown top Millet masa. In this study water content was 11.26 to 12.54%, ash content 1.28 to 1.39% fat content 3.39 to 3.48 %, protein content 8.27 to 9.32 %, calcium 10.08 to 10.62 % antioxidants and phenolic compounds were done in this process. The present work gives a concise idea regarding the physiochemical properties of Nixtamalized Brown top Millet flour enriched with *Nelumbo nucifera*.

Keyword: *Nelumbo nucifera*, Nixtamalization, Mycotoxins, ANOVA, masa.